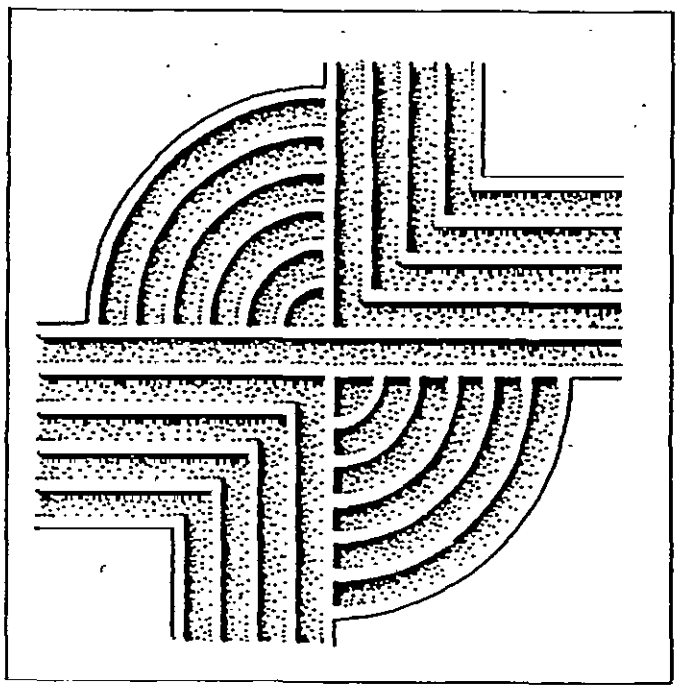
ARCHAEOLOGICAL SURVEY OF THE PECAN GROVE TRACT, ROSE HILL PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 87

ARCHAEOLOGICAL SURVEY OF THE PECAN GROVE TRACT, ROSE HILL PLANTATION, BEAUFORT COUNTY, SOUTH CAROLINA

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Chicora Research Contribution 87

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Background

This investigation was conducted by Ms. Natalie Adams of Chicora Foundation, Inc. for Mr. Robert W. Gerhart, developer of an approximately 50 acre tract known as the Pecan Grove parcel situated on Rose Hill Plantation, in Beaufort County (Figure 1). The parcel is bounded by Colleton River to the north, Rose Hill Plantation to the west, and undeveloped lands to the east and south.

The Pecan Grove parcel is expected to be developed for single family dwellings, with accompanying water, sewer, power, and road construction activities. This development activity has the potential for damaging or destroying archaeological sites and this intensive archaeological survey was conducted in order to allow the developer to obtain S.C. Coastal Council certification. This study is intended to provide an overview of the archival research and the archaeological survey of the tract sufficient to allow the S.C. State Historic Preservation Office to determine the eligibility of sites for inclusion on the National Register of Historic Places.

In addition, this study will provide a detailed explanation of the archaeological survey of the Pecan Grove parcel, and the findings. The statewide archaeological site files held by the South Carolina Institute of Archaeology and Anthropology were examined for information pertinent to the project area. No previously recorded archaeological sites were recorded for the project area. The Beaufort County Cartographic Survey was also consulted for sites in the project area (Hacker and Trinkley 1992). Chicora Foundation initiated consultation with the South Carolina State Historic Preservation Office on July 17, 1992 concerning any National Register buildings, districts, structures, sites, or objects in the project area, as well as the results of any structures surveys on file with that office. No response was received. They were contacted again on November 12, 1992 and provided the necessary information. No National Register sites were located in the project area, however, Rose Hill Plantation is found adjacent to the study area.

The historic research was conducted at the Beaufort County Register of Mense Conveyance, the Beaufort County Probate Court, the Charleston County Register of Mense Conveyance, and the Charleston County Public Library by Ms. Debi Hacker and Dr. Michael Trinkley on July 20 and 21, 1992. The archaeological survey was conducted by Natalie Adams and Darwin Ramsey-Styer from July 20 to July 21, 1992. Field work conditions were good and a total of 24 person hours were devoted to the study. The report preparation (including laboratory studies) was conducted on July 24 and 28, 1992. The artifacts from this project will be curated at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1992.3, ARCH 3285 through ARCH 3296.

Goals

The primary goals of this study were, first, to identify the archaeological resources of the Pecan Grove tract and, second, to assess the ability of these sites to contribute significant archaeological, historical or anthropological data. The second aspect essentially involves the sites' eligibility for inclusion in the National Register of Historic Places, although Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead compliance agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The secondary goals were to examine the relationship between site location,

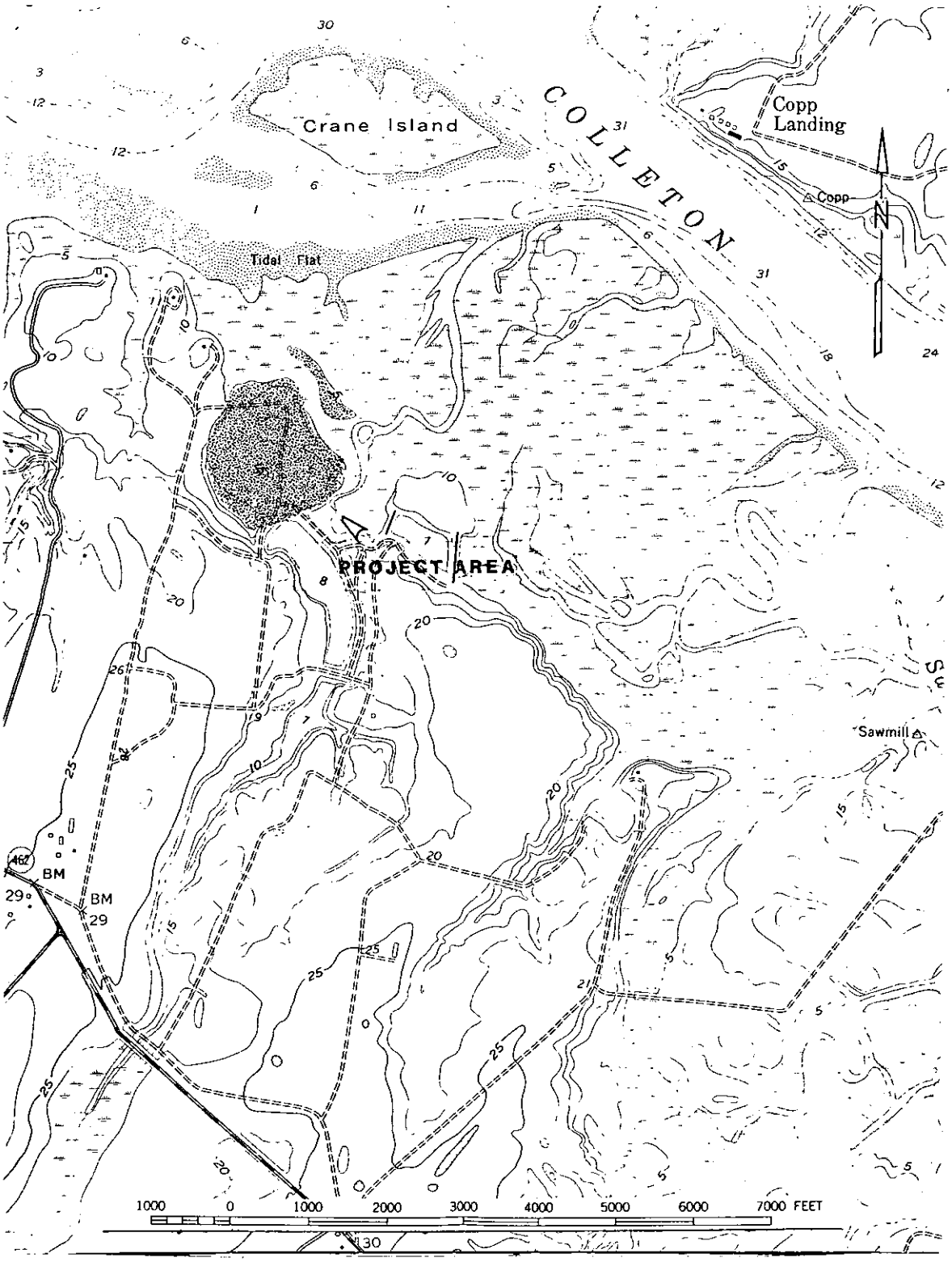

Figure 1. Location of the Pecan Grove parcel on the Spring Island USGS quadrangle map.

soil type, and topography, expanding the previous work by Brooks and Scurry (1978) and Scurry and Brooks (1980) in the Charleston area, and Trinkley (1987, 1989) on Hilton Head and Daufuskie Islands for prehistoric site location, and South and Hartley (1980) for lowcountry historic site locations.

Work at prehistoric sites in the area has revealed relatively small, shell and nonshell middens found almost exclusively adjacent to tidal creeks or sloughs. Few sites have been found in the interior, away from both present marsh habitats and relic sloughs. Most sites, based on previous studies, are found on excessive to moderately well drained soils, although a few are consistently found in areas which are poorly drained (which suggests that factors other than drainage may occasionally have determined aboriginal settlement location).

Research by South and Hartley (1980) suggests that major historic site complexes will be found on high ground adjacent to a deep water access. Plantation main houses tend to be located on the highest and best drained soils for both health and status reasons. Slave settlements tend to be located for easy access to the fields, although clearly other considerations were involved, and slave rows are often found on low, poorly drained soils.

As previously mentioned, no recorded archaeological sites were found at the South Carolina Institute of Archaeology and Anthropology site files and the Beaufort County Cartographic Study indicated that the nearest historic settlement (Spring Island 5) is situated to the west, on the Rose Hill development. Although no sites were known to be located on the parcel, the archaeological potential was thought to be relatively high, based on the presence of moderately well drained soils and the proximity of tidal creeks.

Curation

Artifacts recovered from this study will be curated with The Environmental and Historical Museum of Hilton Head Island as Accession Number 1992.3, catalog numbers ARCH 3285 through ARCH 3292. All original field notes (including photographic materials) and archival copies will also be curated at this facility. Site numbers have been assigned by the South Carolina Institute of Archaeology and Anthropology. Additional information on the conservation of the recovered materials can be found in the section on laboratory methods.

Effective Environment

Beaufort County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the south and southeast by the Atlantic Ocean, to the east by St. Helena Sound, to the north and northeast by the Combahee River, to the west by Jasper and Colleton counties and portions of the New and Broad rivers. The mainland primarily consists of nearly level lowlands and low ridges. Elevations in the county range from about sea level to slightly over 100 feet above mean sea level (MSL) (Mathews et al. 1980:134-135). Additional environmental information on the Hilton Head area is available from Trinkley (1986, 1987).

Elevations in the survey area vary from about 5 feet mean sea level (MSL) adjacent to the marsh to about 15 feet MSL inland. Several overgrown dirt roads are found in the tract with the main road entering the tract from the southwest and exiting on the eastern side.

Vegetation in the Pecan Grove tract consists of maritime forest and mixed pine and hardwoods along the marsh edges while the eastern inland portion contains a grove of pecan trees and the western inland portion consists of grasslands. All of the vegetation appears to have been established within the last 100 years, providing clear evidence of the dramtic changes characterizing the lowcounty.

Soils in the Pecan Grove tract are the somewhat poorly drained Coosaw loamy fine sands and moderately well drained Nemours fine sandy loams. On the Coosaw soils the Ap horizon, about 0.7 foot in depth, consists of dark grayish brown loamy fine sand, overlying a B horizon of light brownish gray loamy fine sand. The seasonal water table may be within 1 to 2 feet of the surface. Typically the Ap zone of the Nemours soils consists of dark grayish brown fine sandy loam about 0.7 foot thick. The underlying material to a depth of 0.8 foot is pale brown fine sandy loam (Stuck 1980).

Background Research

Several previously published archaeological studies are available for the Hilton Head area to provide background, including the Fish Haul excavation study (Trinkley 1986), Cotton Hope Plantation, located on Skull Creek (Trinkley 1990a), testing at Stoney/Baynard Plantation (Adams and Trinkley 1991), survey of the a portion of Indigo Run Plantation (Adams and Trinkley 1992), excavation at a Savannah/St. Catherine's site on Hilton Head Plantation (Trinkley et al. 1992), and the reconnaissance level survey of Hilton Head Island for the Town of Hilton Head (Trinkley 1987). Also, considerable survey and excavation work has been conducted on nearby Pinckney Island (Drucker and Anthony 1980; Trinkley 1981), Spring and Callawassie Islands (Trinkley 1990b and 1991); and Daufuskie Island (Trinkley 1989a). These sources should be consulted for additional details.

It is usually much easier to conduct historical research on a 500 acre, rather than 50 acre, tract since minor errors in location or plotting are less likely to cause significant problems. This is particularly true for Beaufort County where so many of the historic records have been destroyed and those that remain are often spread among a number of institutions. In spite of these problems, a near complete chain for the property has been developed, although the earlier portion is based almost exclusively on the research on H.A.M. Smith (1988).

Smith (1988:86) reports that the earliest owner was Sir John Colleton, who in 1718 was granted the 12,000 acre Devils Elbow barony. This tract, as originally laid out encompassed the area betweem the Okeetee or Colleton River to the north, the May River to the south, the Chechessee River to the east, and the Duke of Beaufort's Barony to the west. Colleton transferred the property to his son Peter in 1726. Peter died sometime between 1733 and 1748 and Smith suggests that "under the limitations of the deed of gift from his father, the Devils Elbow barony went to his brother, the Honorable John Colleton of Fairlawn barony" (Smith 1988:87).

Colleton appears to have made elaborate plans for the agricultural development of the baron and Smith quotes a 1750 agreement with Morgan Saab:

> for the cultivation & improvement of a certain barony belonging to the said John Colleton situate and being at a place called the Devils Elbow in Port Royal river in Granville County (Quoted in Smith 1988:88).

Colleton was to contribute 61 slaves, Saab 53 slaves. Under the direction of Saab they would be used for seven years to:

> clear and cultivate and make plantations and work & labour upon the said Barony byu improving and breeding flocks planting rice corn and other grain sawing timber making pitch tar turpentine Indigo & other commercial commodities thereon (Quoted in Smith 1988:88).

Clearly Colleton intended to deverisfy the plantation, planting provision crops, Indigo as a cash crop, engaging in timber activities, and also using portions for livestock - essentially ensuring that all portions of the land were profitable.

These plans, however, did Colleton little good. He died later that same year, leaving the property to his son, also known as John, who appears to have profited well from the plantation. Smith (1988:88) reports that the plantation produced an abundance of indigo and that livestock was plentiful. Again, however, the Colleton dreams were destroyed - this time by the American Revolution.

Situated in the path of the British advances, the Beaufort area was devestated. Smith reports that the livestock on the Devils Elbow destroyed by the British was valued over £8,000. He speculates that that, "it is probable that it was largely swept clear of its labour in the shape of slaves, and of its provisions and buildings" (Smith 1988:88).

Upon John Colleton's death in 1777 the property passes to his daughter, Louisa Carolina Colleton, although he had already sold off over 6000 acres. Marrying Richard Graves, Louisa sold a portion of the barony, apparently that portion containing Pecan Grove, to Benjamin Guerard. She held the remainder of the property until her death, at which time was was divided and sold (Smith 1988:89).

The title between Guerard's ownership in the late eighteenth century and the Civil War is not entirely clear, with Smith (1988:89) suggesting that the tract passed from Guerard to William Wigg Barnwell. While there is no source cited for this supposition, this study supports the assertion, based on plats and deeds during the postbellum refering to the tract as "Barnwell Plantation." It is possible that additional investigation, much beyond the needs of the current study, might provide additional information about the tract during this period. In particular, it would be useful to know whether slaves and an overseer were housed on the plantation.

Regardless, a court action in 1877 (Beaufort County Court of Common Pleas, William S. Trenholm, Executor of George A. Trenholm, deceased v. Anna Helen Trenholm) caused the property to be put up for sale by the Beaufort County Sherrif (Beaufort County Register of Mense Conveyance, DB 16, p. 24). The 1114 acre property was purchased by H.A.M. Smith for $505. Included were 864 acres called "Belfair" and bounded to the north by th Oaketee or Colleton River, to the east by lands still belonging to James P. Guerrard, and on the west by land of John W. Kirk.

The property was held by Smith, apparently with little or no activity, until his death in 1924. In 1927 the executors of his estate sold the 733 acre plantation, known as Belfair or Barnwell to W. Moseley Swain of Haverford, Pennsylvania. The property was desbribed as bounded to the north by the Okatee or Colleton River, to the east by lands formerly of James P. Guerard, now of Cram and knwon as Oak Forest, to the south by Fording Island Road (today the approximate route of U.S. 278), and to the west by lands formerly of John W. Kirk, now owned by Glover (Beaufort County Register of Mense Conveyances, DB 45, p. 46). With this sale was the preparation of the first plat known for the tract (Figure 2). Pecan Grove is situated in the northwest corner of the property, although the plat fails to reveal any development on the tract. The 1942 Okatie 15' topographic quadrangle also fails to show any structures on Pecan Grove, although a portion appears to be cultivated at the time.

The tract was later sold to Walter L. Mingledorf, who in 1951 sold the 733 acres to the Savannah Machine and Foundary Company (Beaufort County Register of Mense Conveyances, DB 70, p. 316). The Savannah Machine and Foundary Company was in the process of accumulating large tracts of land along the Colleton River, eventually amounting to over 1600 acres. In 1969 these parcels, including the 733 acre Belfair or Barnwell tract, were sold to Marine Railway Company, Inc. (Beaufort County Register of Mense Conveyances, DB 163, p. 17). In 1982 these tracts were conveyed to the Welton Corporation, as shown on TMS R600 023 000 0004 (Beaufort County Register of Mense Conveyances, DB a344, p. 1).

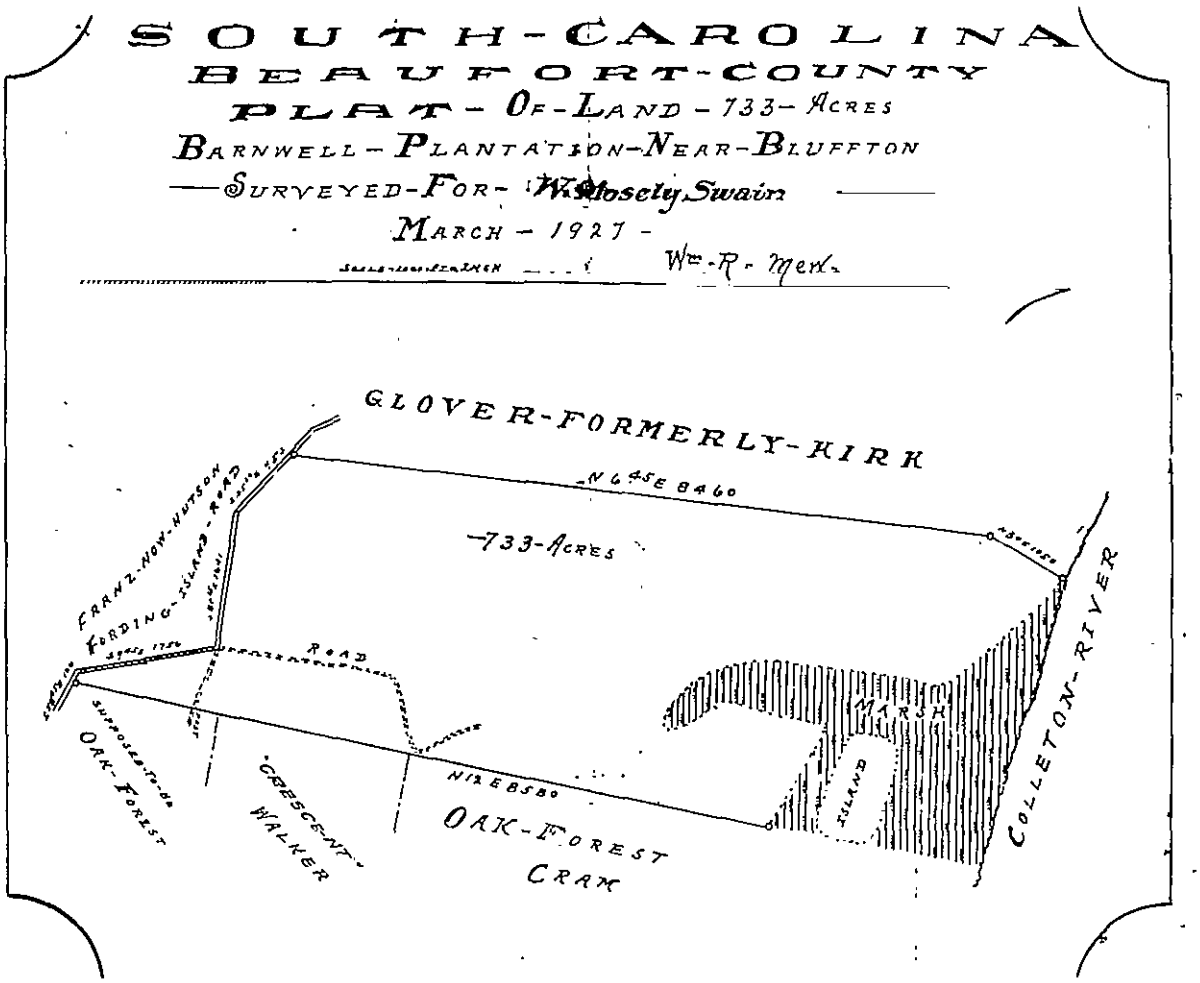

Figure 2. 1927 plat of the Pecan Grove tract.

The historical study suggests that while Belfair or Barnwell may have seen settlement during the colonial or antebellum periods, its postbellum use was largely limited to phosphate mining, speculation, hunting, or the use of timber resources.

Field Methods

The initially proposed field techniques (detailed in Chicora's letter proposal submitted to Anthony/Gerhart, Inc.) involved the placement of shovel tests at 100 foot intervals in the Pecan Grove tract. All soil would be screened through 1/4-inch mesh. Notes would be retained on stratigraphy and the tests would be immediately backfilled. If archaeological remains were encountered, the spacing of the tests would be decreased to no greater than 50 feet in order to determine site boundaries, site integrity, and temporal periods represented.

All shovel tests would measure 1-foot square and would be excavated to sterile B horizon sand. For positive shovel tests, representative soil profiles would be drawn and soil coloration would be described using Munsell soil color

charts. All cultural remains, except brick, shell, mortar, and charcoal, would be retained. In addition, a visual inspection of the shoreline would be used to located eroding sites.

The information required for S.C. Institute of Archaeology and Anthropology site forms would be collected in the field and photographs would be taken as deemed appropriate by the field investigator. A site would be defined at the presence of cultural items in at least two successive shovel tests, otherwise the materials would be characterized as "isolated remains."

These plans were put into effect, with no significant deviations. In addition, areas of good surface visibility, such as bare spots in dirt roads, were examined for remains (and were surface collected). A total of 237 shovel tests in 41 transects were excavated.

Laboratory Analysis

The cataloging and analysis of the specimens was conducted at the Chicora laboratories in Columbia on July 24 and 28, 1992. The collections have been accepted for permanent curation by The Environmental and Historical Museum of Hilton Head Island as Accession Number 1992.3. No materials requiring conservation treatments were encountered during the investigations. In addition, all original field notes and archival copies of the field notes will be curated with the collections. All photographic materials have been processed to archival standards.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric ceramics were classified using common south coastal types (DePratter 1979; Trinkley 1983). The temporal, cultural, and typological classifications of the historic remains follow Noel Hume (1970), Miller (1980), Price (1979), and South (1977).

Identified Sites

As a result of the archaeological survey of the Pecan Grove parcel, five sites and two isolated finds were identified (Figure 3). Prehistoric shell middens in the region have recently been characterized as different types with some benefit (see Trinkley 1990b). Type 1 sites are small, thin shell middens found on the shore edge in close proximity to a tidal slough or marsh. Type 2 sites are large heaps of shell, also found on the shore edge and in close proximity to the marsh. Type 3 sites are "inland" sites which are 200 to 800 feet from a water source, but which still evidence shell midden desposits. Type 4 sites are "interior" sites which fail to evidence any shell midden deposits.

38BU1301 is a shell midden site located on the southeastern shore of a small slipper shaped island just northeast of the major portion of the survey tract. A series of eight shovel tests were placed at 25 foot intervals in the site area in two transects following the shoreline. Of these eight tests, one (12.5%) evidenced dense, but shallow shell. The site is visible on the ground surface as four small, thin middens located approximately 25 to 50 feet from the shore. No artifacts were recovered. The site runs for approximately 120 feet along the shore and about 50 feet inland. Although no diagnostic artifacts were recovered from the site, it is believed to be prehistoric in origin based on its similarity to Type 1 shell midden sites found in the Beaufort area (see Trinkley 1990b).

The central UTM coordinates are E513160 N3573140 and the soils are somewhat poorly drained Coosaw loamy fine sand. Soil profiles indicate an Ap horizon of about 0.6 foot of dark grayish brown soil (Munsell 10YR4/2) overlying a light brownish gray (Munsell 2.5YR6/2) subsoil.

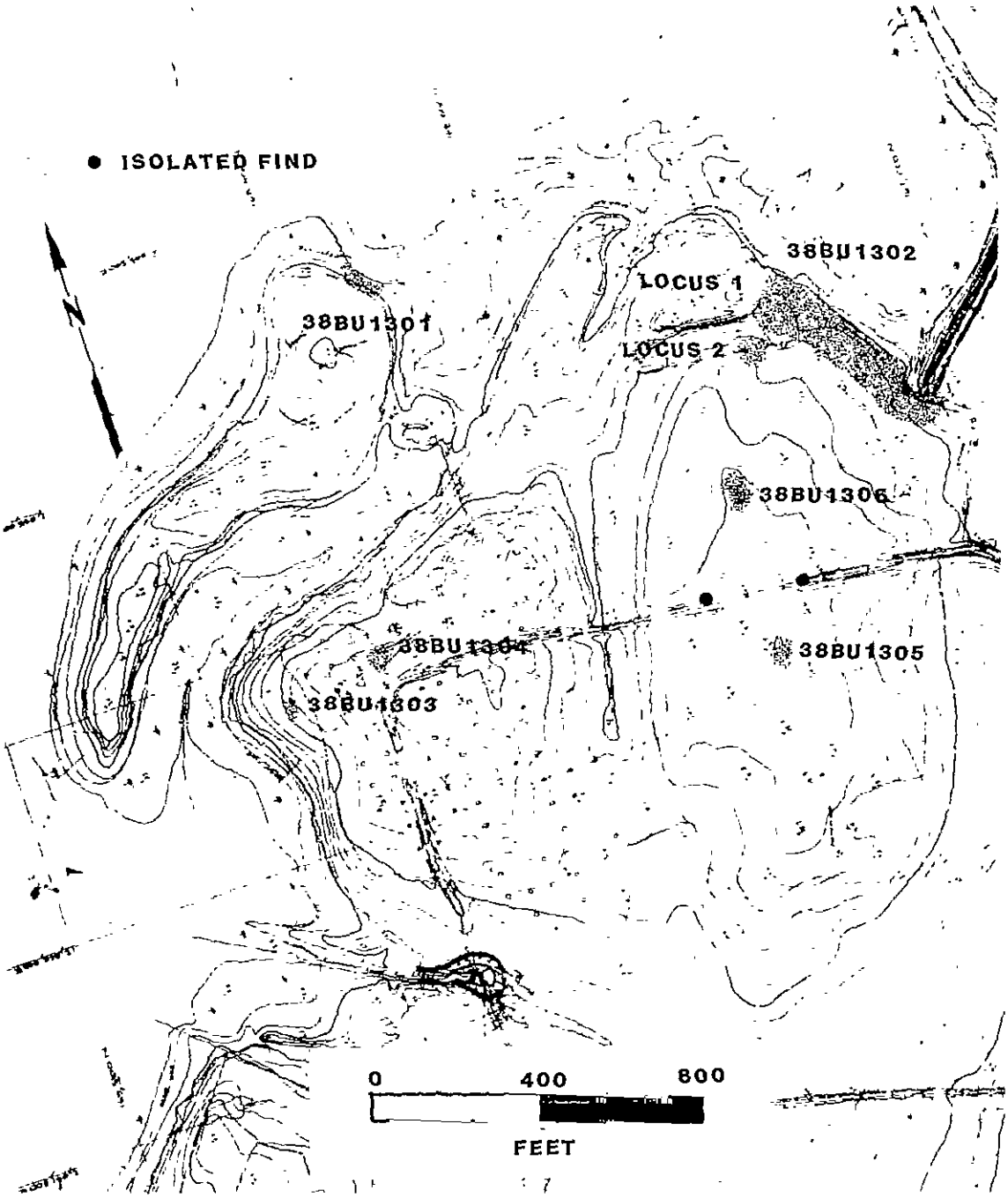

Figure 3. Location of archaeological resources on the Pecan Grove tract.

38BU1301 is not recommended as eligible for inclusion on the National Register. No artifacts were recovered in the shovel tests and the thin, surface middens are unlikely to contribute significant information on prehistoric subsistence.

38BU1302 is a Middle/Late Woodland Type 2 shell midden site located along the southeastern boundary of the parcel (Figure 4). A series of 34 shovel tests were placed at 50 foot intervals in 11 transects in the site area. Of these 34 tests, 15 tests (44.1%) evidenced artifacts and/or moderate to heavy shell or shell midden. In addition to the shovel tests, one 2 by 2 feet test unit was excavated in one of the midden areas to gather diagnostic materials and document intact remains or features. The site consists essentially of only a prehistoric component, although one historic artifact (a dark olive wine bottle base) was found on the marsh shore just northeast of the spillway.

Locus 1 of the site is found just west of the spillway and follows the marsh edge east of the spillway for approximately 500 feet. It extends inland for a minmum distance of 100 feet and a maximum of 300 feet. The survey located four distinct shell midden areas scattered along the marsh edge. In addition a small locus (designated Locus 2) of thin shell was found to the north of the main site area on the eastern side (Figure 4).

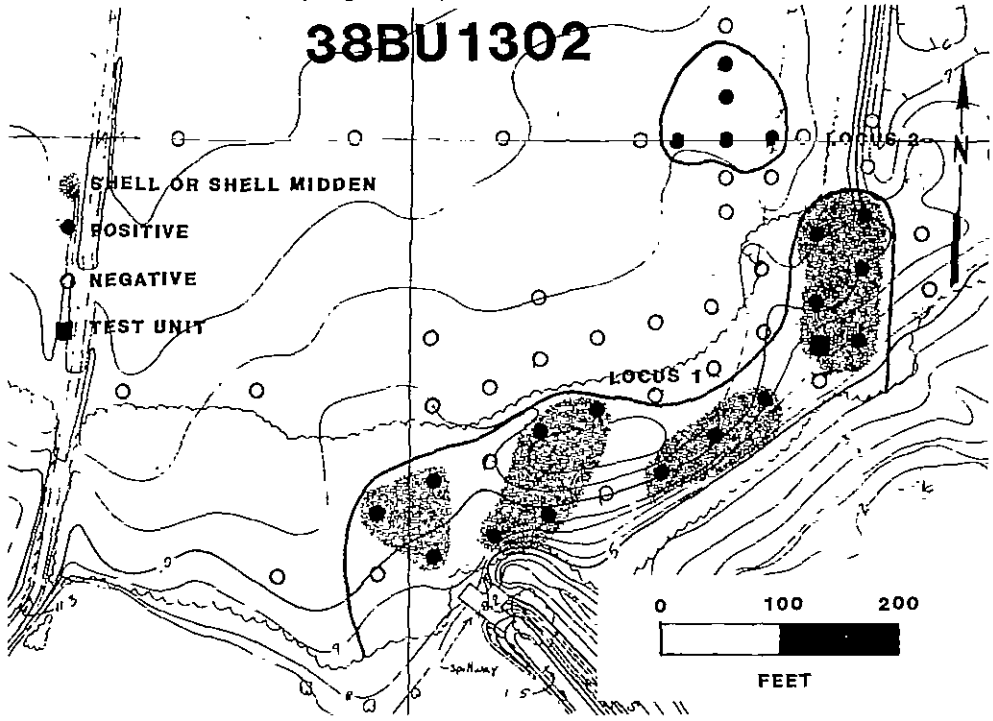

Figure 4. Location of shovel tests and middens at 38BU1302.

One 2 by 2 foot test pit oriented N45°W was excavated in an inland midden area. This unit revealed intact midden extending to a depth of 0.6 foot below grade. The midden soils are dark grayish brown in color (Munsell 10YR4/2) overlying dark yellowish brown subsoil (Munsell 10YR4/4). Recovered from this unit were 16 prehistoric sherds, of which five were large enough for further analysis. Four (80%) are St. Catherine's Cordmarked, while one may represent an earlier Deptford phase occupation. Midden shell was predominately oyster with small amounts of clam.

Artifacts recovered during shovel testing consist of one Coastal Plain chert core fragment and one Deptford Cordmarked sherd. Surface visibility was generally poor although the dark olive wine bottle base and one Deptford

Cordmarked sherd were collected from the bank of the spillway.

The central UTM coordinates are E513100 N3572760 and the soils are classified as moderately well drained Nemours fine sandy loam. The site measures 500 feet along the shore and up to 300 feet inland. Soil profiles indicated that the Ap horizon is generally 0.7 in depth and dark grayish brown in color (Munsell 10YR4/2). The subsoils are dark yellowish brown in color (Munsell 10YR4/4). Soil color in some midden areas were very dark grayish brown (Munsell 10YR3/2).

38BU1302 is recommended as eligible for inclusion on the National Register. The site appears to have been only minimally damaged by shore erosion and the construction of the adjacent spillway, but is otherwise intact. The site may have functioned as a shellfish collection area, although recently Lawrence (1992) has suggested that these sites functioned as fishing camps. While data recovery at 38BU833 on Hilton Head Island (Trinkley et al. 1992) suggests that Lawrence's interpretation may be flawed, it still deserves further testing. The site has the potential to further test ideas about the function of such sites and their relationship to the total settlement and subsistence system.

Previous published work on shell midden sites in Beaufort County (eg. Trinkley 1990, 1991, and Trinkley et al. 1992) has been primarily on type 2 shell middens on Callawassie, Spring, and Hilton Head Islands. Trinkley (1991:217) has suggested that these investigations have offered "an imperfect view of settlement from the late Early Woodland through the Late Woodland and they are most successful in demonstrating the need for intensive studies at a much larger sample of shell midden sites". The sites all exhibit evidence of structural remains, shell pit features, and varying densities of faunal remains. Given what could be perceived as a redundancy of data, it is clear that much larger samples need to be obtained using more stringent data recovery methods. Although excavations of seven (38BU19, 38BU464, 38BU747, 38BU833, 38BU1214, 38BU1249, and 38BU1262) shore-line midden sites in the Beaufort County area have been published (Trinkley 1990b, 1991, and Trinkley et al. 1992), very little is known about the range of activities there or how they functioned as a part of the total settlement system. At 38BU1214, located on Spring Island, there was considerable site complexity, with the probability of intra-site patterning, and the probability of discrete activity areas. The excavations there certainly raised more questions than they answered. One result, however, was certain, the 0.5% sample excavated from 38BU1214 indicates that much larger sample sizes are required before questions relating in intra-site patterning and site function can be adequately addressed.

38BU1303 is a very small area (approximately 2 feet) of shell midden (Type 1) eroding into the marsh on the northeastern edge of the tract. A series of two shovel tests immediately adjacent to the marsh edge at five foot intervals yielded no shell or artifacts. Surface visibility was poor and no artifacts were surface collected.

The central UTM coordinates are E512820 N3573220 and the soils are moderately well drained Nemours loamy fine sand. Soil profiles indicated that the Ap horizon is generally 0.7 in depth and dark grayish brown in color (Munsell 10YR4/2). The subsoils are dark yellowish brown in color (Munsell 10YR4/4).

38BU1303 is not recommended as eligible for inclusion in the National Register. This site has almost completely eroded into the marsh and is too small to yield any significant remains.

38BU1304 is a twentieth century tenant occupation located in the northeastern portion of the tract near a 90° curve in the main dirt road. The approximate boundaries of the site are visible and can be defined as a small overgrown area between the marsh edge woods and the pecan grove. A series of nine shovel tests were excavated at 25 foot intervals in a cruciform pattern. Of these shovel tests, six (66.7%) yielded artifacts. These artifacts include two

porcelain jar sealer fragments, four clear bottle glass sherds, and three plain whiteware sherds. Whiteware has a date range of 1820 to 1970 (Bartovics 1977), giving it a mean ceramic date of 1895. The presence of the jar sealers (Toulouse 1977) and clear (unsolarized) glass suggests a twentieth century date for the site. Surface visibility was poor and no artifacts were surface collected. The site is a approximately 50 feet by 50 feet in size.

The central UTM coordinates are E512920 N3573040 and the soils are moderately well drained Nemours loamy fine sand. The Ap horizon is 0.8 feet in depth and dark grayish brown in color (Munsell 10YR4/2). The subsoil is dark yellowish brown (Munsell 10YR4/4).

38BU1304 is not recommended as eligible for inclusion on the National Register. The artifacts were sparse and the site is small. No brick was noted on the ground surface or in shovel tests which suggests that the house may have been completely dismantled and removed. Alternately, the house may have been a relatively short term occupation with ephemeral architectural features. No evidence of this structure was obtained on any of the twentieth century maps consulted during the project. This site has little potential to contribute to a better understanding of twentieth century tenant lifeways.

38BU1305 is a relatively small Type 3 prehistoric shell midden located about 200 feet west of a north-south dirt road, on a rise in the middle of an old pasture. Thirteen shovel tests were excavated at 25 foot intervals in a cruciform pattern. Of these 13 shovel tests, five (38.5%) yielded moderate shell to moderately dense midden. Surface visibility was poor and no surface collection was made. No artifacts were recovered in the shovel tests. The site measures approximately 75 feet by 50 feet in size. Surface visibility was poor and no artifacts were collected.

The central UTM coordinates are E512740 N3572840 and the soils are somewhat poorly drained Coosaw loamy fine sand. Soil profiles indicate an Ap horizon of about 0.6 foot of dark grayish brown soil (Munsell 10YR4/2) overlying a light brownish gray (Munsell 2.5YR6/2) subsoil. Where midden soils occurred (normally buried at a depth range of between 0.5 foot and 1.0 foot), the soils were very dark grayish brown (Munsell 10YR3/2).

While sites such as 38BU1305 are of special interest, being removed from the nearby marsh and often being small, this particular site does not appear to possess sufficient integrity to warrant additional investigation. No artifacts were recovered and the shovel tests suggest that the site has been damaged by cultivation. This process is likely to have significantly reduced the subsistence information that can be obtained from the site. Consequently, 38BU1305 is recommended as not eligible for inclusion on the National Register.

38BU1306 is similar to 38BU1305 and consists of a moderate concentration of shell (type 3 midden) in a 100 feet by 50 feet area. It is located about 400 feet east of a north-south dirt road on a small rise in the middle of an old pasture. Twelve shovel tests were excavated at 25 foot intervals in a cruciform pattern. Of those 12 shovel tests, four (25%) yielded artifacts or light to moderate shell. Two Deptford Cordmarked sherds were recovered from the shovel tests. Surface visibility was poor and no artifacts were surface collected.

The central UTM coordinates are E513040 N3572840 and the soils are somewhat poorly drained Coosaw loamy fine sand. Soil profiles indicate an Ap horizon of about 0.8 foot of dark grayish brown soil (Munsell 10YR4/2) overlying a light brownish gray (Munsell 2.5YR6/2) subsoil. When shell was found, it occurred in a thin band (0.1 foot) approximately 0.4 foot below ground surface.

Like 38BU1305, this site type represents an occupation about which very little is known. As a result, Type 3 middens are of particular interest and deserve more detailed archaeological attention. However, for such sites to

contribute significant information they must possess a relatively high degree of integrity (although neither great size nor a large artifact content is necessary). The presence of an intact band of shell suggests that some degree of integrity is present at 38BU1306 and that faunal remains (beyond shellfish) may be preserved. In addition, the recovery of several artifacts are sufficent to place the site in a temporal framework. In spite of this, its location within the pasture also suggests that the site may have suffered, thusfar unobserved, damage. Consequently, this site is recommended as potentially eligible for inclusion on the National Register of Historic Places.

Isolated Finds

Two isolated artifacts were recovered during the survey. One is a small unidentifiable sherd found in the main dirt road approximately 100 feet south of a slough. Four shovel tests were excavated in cardinal directions. None yielded artifacts or shell. Another artifact, a Deptford Cordmarked sherd, was found in the same dirt road approximately 150 feet north of the marsh edge woods line. Four shovel tests in cardinal direction yielding no artifacts or shell.

Recommendations and Conclusions

The archaeological survey of the Pecan Grove tract identified six sites and two isolated finds. Of the five sites, one (38BU1302) is recommended as eligible for inclusion on the National Register and another (38BU1306) is recommended as potentially eligible for inclusion on the National Register. The remainder of the sites are recommended as not eligible and no further work appears necessary at 38BU1301, 38BU1303, 38BU1304, or 38BU1305.

Site 38BU1302

Site 38BU1302 represents a Deptford/St. Catherine's period shell midden. The site appears to have sustained only minor damaged from erosion and spillway construction, and is generally intact, possessing a high degree of integrity. It may have functioned as a shellfish collection area, although recently Lawrence (1992) has suggested that these relatively small shell midden sites functioned as fishing camps. While data recovery at 38BU833 on Hilton Head Island (Trinkley et al 1992) suggests that Lawrence's interpretation may be flawed, it still deserves more testing. The site has the potential to further test ideas about the function of such sites and their relationship to the total settlement and subsistence system.

Green spacing is recognized as an appropriate, and often cost-effective, mitigation measure for archaeological site conservation. Such green spacing, however, must ensure the permanent protection and integrity of the archaeological data. The following recommendations are offered if green spacing is the chosen alternative. These provisions are subject to the review and approval of the State Historic Preservation Office.

1. The site is to be blocked out in the field with a buffer sufficient to ensure complete protection of the remains.

2. The area should be cleared of understory by hand. No heavy equipment should be used and all cut vegetation should be removed from the site area.

3. The area should continue to be clearly defined during all phases of construction. No equipment should be allowed in these areas, or be allowed to use the area as a turn around. The area should not be used to stockpile supplies, or be otherwise disturbed. All personnel, including contractor's personnel, should be strictly prohibited from entering the area. This is particularly important to prevent looting of the site.

4. Any landscaping in the area should be conducted by hand, and ground disturbance should be limited to the upper 0.2 foot of soil. No utilities, including sprinkler lines, should be placed through the area.

5. If more intensive landscaping is desired, then the sites should be protected by placing an isolating layer of clean builder's sand over the area. This layer should be at least 0.5 foot thick and it may be appropriate to also use filter cloth between the site and the sand zone. Additional topsoil then may be placed on top of the sand. Landscaping or sprinkler lines should not exceed the depth of the isolating level of top soil and sand.

6. An historic easement or protective covenant protecting the site set aside in green spacing and this protection should be in perpetuity.

7. Appropriate security should be provided to ensure that no one digs or otherwise disturbs the site.

If green spacing cannot be accomplished at 38BU1302, data recovery will be necessary.

As suggested previously, intensive excavation at the site is required to gather adequate data. It is suggested that large areas of midden areas be examine to understand macro-stratigraphy. Generally, even ten foot profiles do not reveal stratigraphic differences in midden deposition. At 38BU833, a St. Catherines/Savannah site on Hilton Head Island, banding was only visible within a twenty foot profile. If there are depositional difference, they can be identified with larger profiles and can address questions relating to changing shell fish gathering strategies. In midden areas, it is suggested that all soils be waterscreened for maximal faunal and ethnobotanical return.

In non-midden areas, it is suggested that large, contiguous block excavations take place in one area of Locus 1. Another area that deserves investigation is Locus 2. Here a small amount of shell was discovered in a 100 by 100 foot area which appears to be spatially distinct from the remainder of the site. Units here can answer questions about function and activities. While it may be unlikely that structural or faunal remains will be recovered here, the area may represent a specific or infrequently used activity area and, therefore, may yield information about partial site purpose. Large scale excavation in a Locus 1 non-midden site area has the potential uncover features and their relationship to other features, shell middens or artifact concentrations to answer questions on intra-site patterning. It is believed that more intensive work than was performed at 38BU1214 on Spring Island (see page 10) will provide a clearer picture of site function and activities, perhaps in relation to houses, trash disposal areas, and other areas of specific activity.

It is suggested that 1000 square feet be excavated at 38BU1302, with 300 square feet being used to investigate one midden, preferably the eastern-most midden. It appears to be denser, less disturbed by erosion or the spillway, and more likely to contain preserved faunal remains. Once there is an understanding of midden stratigraphy or depositional events, the remaining midden areas should be excavated by these stratigraphic zones. All units with midden should be water screened through 1/8th inch mesh. There is a constantly available water source above and below the spillway. At Locus 2, 50 two by two foot units placed at 10 foot intervals on 20 foot transects (total 200 square feet) can be used to locate activity areas and features. If after 100 square feet have been excavated and no artifacts (beyond shell) or features are encountered, the remaining 100 square feet should be transferred to Locus 1 to be used at the discretion of the field director. The remaining 400 square feet should concentrate in one non-midden area

to locate structural remains, features, and activity areas. This area should be located near the excavated midden. By concentrating the excavations all in one area the likelihood of encountering features and understanding their relationships to one another and the excavated midden is increased. While intra-site patterning cannot be examined using this research design, individual activities may be better understood and provide a firmer understanding of site function, beyond its use as a shellfish collecting area.

This 1000 square feet represents 1.25% of the site area. It is expected that these investigations will require three weeks of excavation.

38BU1306

This site represents a potentially intact Type 3 shell midden on Pecan Grove. There is some indication of an intact, albeit thin, midden, suggesting that the site has not received significant disturbances. In addition, the midden has yielded several datable artifacts, indicating that temporal data can be obtained. The presence of an identifiable band of shell suggests that other faunal remains may be preserved.

While at the present time all of these remain possibilities, suggested but not proven, by the intensive survey. If the initial indications are correct, then the site may be capable of contributing significant information on the nature of these interior sites, including a better understanding of site formation (i.e., how did these thin bands of shell become deposited away from the marsh; do they perhaps represent smear from two or three dense features or activities areas), subsistence (i.e., what faunal remains are present and what do they indicate regarding the diffuse or focal nature of the subsistence quest; are the shellfish at these inland sites in any way distinct or different from those found at marsh middens), and cultural remains (i.e., are artifacts present which would support the use of the site as a fishing camp; are several different types of ceramics associated).

To determine the potential of this site to answer these, and other, questions it appears necessary to conduct more intensive testing at the site than was capable during the intensive survey. Specifically, it is recommended that the site be tested using a series of 2 by 2 foot units placed at 15 foot intervals. The excavation of approximately 28 such tests will result in the sampling of slightly over 2% of the site. Each unit will allow not only recovery of cultural remains, but will also allow for the careful examination of the midden and its subsistence remains. Shell midden or lenses should be screened through 1/8th inch mesh to recover any faunal or ethnobotanical materials that may be preserved. The close interval testing will allow a better understanding of midden formation and the presence of features.

Based on this information it should be possible to determine the site's ability to contribute significant information toward a wide variety of detailed research questions.

Other Results

The archaeological survey of the Pecan Grove tract has done more than identify and assess archaeological resources, it has provided some significant information on the use of a somewhat constricted and isolated area by the prehistoric inhabitants. The marsh edges adjacent to tidal creeks were used for food gathering, and possibly habitation, as evidenced at 38BU1302, while higher inland areas may have been used as overnight camp sites during food collection forays (such as at 38BU1305 and 38BU1306, and possibly Locus 2 of 38BU1302) from base camps located off of the survey tract.

Sites 38BU1302 and 38BU1303 are located on moderately well drained soils and are found adjacent to tidal creeks or marsh. Site 38BU1301, is located on

somewhat poorly drained soils, but is adjacent to a tidal creek. Sites 38BU1305 and 38BU1306 are both located on somewhat poorly drained soils, but are found at higher elevations, away from the marsh. Little is known about the function of these type 3 middens.

One historic site was found (38BU1304) which appears to be a twentieth century occupation, possibly belonging to a caretaker. It is located on moderately well drained soils at the edge of the pecan grove.

It is possible that other archaeological remains may be encountered in the survey tract during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the South Carolina State Historic Preservation Office or to Chicora Foundation, Inc. No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist.

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